

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571) 273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

28120 7590 09/27/2005

FISH & NEAVE IP GROUP  
ROPES & GRAY LLP  
ONE INTERNATIONAL PLACE  
BOSTON, MA 02110-2624

12/14/2005 CNGUYEN1 00000048 181945 09688076

01 FC:1501 1400.00 DA  
02 FC:8001 30.00 DA

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Mary Jane DiPalma (Depositor's name)  
*Mary Jane DiPalma* (Signature)  
December 13, 2005 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,076	10/13/2000	Philip A. Beachy	JHUC-P01-016	8453

TITLE OF INVENTION: REGULATORS OF THE HEDGEHOG PATHWAY, COMPOSITIONS AND USES RELATED THERETO

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$0	\$1400	12/27/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEWIS, PATRICK T	1623	514-081000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list  
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

Fish & Neave IP Group  
Ropes & Gray LLP

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Johns Hopkins University School of Medicine

Baltimore, Maryland

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☒ Advance Order - # of Copies 10

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 18-1945 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature *David P. Halstead*

Date December 13, 2005

Typed or printed name David P. Halstead, Ph.D.

Registration No. 44,735

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

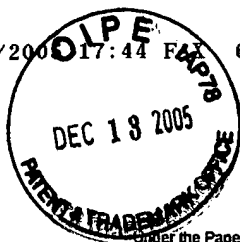
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**FAX TRANSMISSION****DATE:** December 13, 2005**PTO IDENTIFIER:** Application Number 09/688076  
Patent Number**Inventor:** Beachy et al.**MESSAGE TO:** Office of Patent Publication**FAX NUMBER:** (571) 273-2885**FROM:** FISH & NEAVE IP GROUP  
ROPES & GRAY LLP  
David P. Halstead, Ph.D.**PHONE:** (617) 951-7615**Attorney Dkt. #:** JHUC-P01-016**PAGES (Including Cover Sheet):** 3**CONTENTS:** Fee Transmittal (1 page)  
Form PTOL-85 Part B - Fee(s) Transmittal (1 page)  
This Facsimile Cover Sheet (1 page)  
Charge \$1,430.00 to deposit account 18-1945

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PTO/SB/17 (12-04v2)

Approved for use through 7/31/2006. OMB 0851-0032  
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Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). <b>FEE TRANSMITTAL</b> <b>For FY 2005</b>		<b>Complete if Known</b> Application Number 09/688076 Filing Date October 13, 2000 First Named Inventor Philip A. Beachy Examiner Name P. T. Lewis Art Unit 1623 Attorney Docket No. JHUC-P01-016	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27			
<b>TOTAL AMOUNT OF PAYMENT</b> (\$) 1,430.00			

<b>METHOD OF PAYMENT</b> (check all that apply)	
<input type="checkbox"/> Check <input type="checkbox"/> Credit Card <input type="checkbox"/> Money Order <input type="checkbox"/> None <input type="checkbox"/> Other (please identify): _____	
<input checked="" type="checkbox"/> Deposit Account Deposit Account Number: 18-1945 Deposit Account Name: Ropes & Gray LLP	
For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)	
<input checked="" type="checkbox"/> Charge fee(s) indicated below <input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee	
<input checked="" type="checkbox"/> Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 <input type="checkbox"/> Credit any overpayments	

<b>FEE CALCULATION</b>							
<b>1. BASIC FILING, SEARCH, AND EXAMINATION FEES</b>							
Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
<b>2. EXCESS CLAIM FEES</b>							
<b>Fee Description</b>							<b>Small Entity Fee (\$)</b>
Each claim over 20 (including Reissues)							50
Each independent claim over 3 (including Reissues)							200
Multiple dependent claims							360
<b>Total Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>	<b>Multiple Dependent Claims</b>		<b>Fee (\$)</b>
- 20 =		x	=		<b>Fee (\$)</b>		<b>Fee Paid (\$)</b>
<b>Indep. Claims</b>		<b>Extra Claims</b>	<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>			
- 3 =		x	=				
<b>3. APPLICATION SIZE FEE</b>							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
<b>Total Sheets</b>	<b>Extra Sheets</b>	<b>Number of each additional 50 or fraction thereof</b>		<b>Fee (\$)</b>	<b>Fee Paid (\$)</b>		
- 100 =	150	(round up to a whole number) x		=			
<b>4. OTHER FEE(S)</b>							
Non-English Specification, \$130 fee (no small entity discount)							<b>Fees Paid (\$)</b>
Other (e.g., late filing surcharge): 1501 Utility issue fee							1,400.00
8001 Printed copy of patent w/o color							30.00

<b>SUBMITTED BY</b>			
Signature	Registration No. (Attorney/Agent) 44,735	Telephone (617) 951-7615	
Name (Print/Type) David P. Halstead, Ph.D.		Date December 13, 2005	

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office, facsimile no. (571) 273-2885, on the date shown below.	
Dated: December 13, 2005	Signature:  (Mary Jane DiPalma)